



WATER QUALITY REPORT

2006

The City of Alcoa is pleased to present our Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. The bottom line is: The City of Alcoa's water surpasses all federal and state standards for safe drinking water.

Our constant goal is to provide you with a safe and dependable supply of drinking water. That includes efforts to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. We provide water for a majority of Blount County plus Tuckaleechee Utility District.



An example of such a commitment is membership in the Partnership for Safe Drinking Water. This is a voluntary, cooperative effort between the Environmental Protection Agency, the American Water Works Association, and member utilities. The goal is to provide a new measure of safety to millions of Americans by implementing prevention programs where legislation or regulation does not exist. The preventative measures are based around optimizing treatment plant performance and thus increasing protection against microbial contamination in America's drinking water supply.

Our surface water source is the Little River, originating in the Great Smoky Mountains. This is part of the Watts Bar Watershed. A final source water assessment of our watershed with a summary of our susceptibility to potential sources of contamination has been completed. The Tennessee Division of Water Supply considers the Alcoa intake to be of moderate susceptibility. Urban nonpoint pollution is a water quality concern. The Source Water Assessment Plan may be viewed at the Tennessee Department of Environment and Conservation's Web site at www.state.tn.us/environment/dws.

FREQUENTLY ASKED QUESTIONS

Is fluoride in my drinking water?

Yes, trace amounts of fluoride occur naturally in water. The City of Alcoa adjusts this to the level recommended by the American Dental Association and the Center for Disease Control and Prevention for optimal dental health. Numerous studies have shown that fluoridated water will aid in the prevention of tooth decay. More information may be found at www.ada.org and www.cdc.gov.

As shown in the table, the Alcoa Water system had no violations during 2005, meeting or exceeding all Federal and State requirements. The maximum contaminant levels (MCL's) are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink two liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

Public participation in decisions that may affect the quality of our water is welcomed at the Alcoa City Commission meetings, held on the second Tuesday of each month at 7:00 p.m. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. If you have any questions or need additional copies of this report please contact Ken Reynolds, Alcoa Water Plant Supervisor, at 865-983-3911.

IMPORTANT PHONE NUMBERS

New Service.....380-4700

Water Trouble or Leaks

7:00 a.m. – 4:00 p.m.....981-4156

After Hours and Weekends..... 983-3911

Questions About a Bill.....380-4700

Alcoa Water Plant.....983-3911

The City of Alcoa routinely monitors for contaminants in your drinking water as required by Federal and State laws. Unless noted otherwise, the following table shows the results of our monitoring for the period of January 1 to December 31, 2005. In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we have provided the following definitions and comparisons:

Non-Detects (ND) - Laboratory analysis indicates that the contaminant is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - One part per million; equivalent to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter (µg/l) - One part per billion; equivalent to one minute in 2,000 years, or a single penny in \$10,000,000.

Nephelometric Turbidity Unit (NTU) - Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level (MCL) - The “Maximum Allowed” is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - The “Goal” is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL) - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

TEST RESULTS						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Total Coliform Bacteria	No	0% of samples taken	Presence or Absence	0	Presence of coliform bacteria in 5% of monthly samples.	Naturally present in the environment.
Fecal Coliform and <i>E. coli</i>	No	0	Presence or Absence	0	A routine sample and repeat sample are total coliform positive, and one is also fecal coliform or <i>E.coli</i> positive.	Human and animal fecal waste.
Total Organic Carbon **	No	1.0	ppm	N/A	TT	Naturally present in the environment
Turbidity	No	.44 max. .05 ave.	NTU	N/A	TT - ≤ 0.3 NTU in 95% of monthly measurements	Soil runoff.
		99.9%			TT = percentage of samples < 0.3 NTU	
Inorganic Contaminants						
Lead *	No	3.0	ppb	0	AL = 15	Corrosion of household plumbing systems; erosion of natural deposits.
Copper *	No	.04	ppm	1.3	AL = 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Fluoride	No	.89 - 1.15 1.05 ave.	ppm	4	4	Water additive, which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories.
Sodium	No	1.5	ppm	None	None	Erosion of natural deposits.
Volatile Organic Contaminants						
Chlorine	No	2.27	ppm	MRDLG = 4	MRDL = 4	Water additive used to control microbes
Haloacetic Acids HAA	No	16 - 56 38 ave.	ppb	0	60	By-product of drinking water chlorination.
Total Trihalomethanes TTHM	No	20 - 104 55 ave.	ppb	0	80	By-product of drinking water chlorination.

* 0 out of 30 sampling sites exceeded the lead action level and 0 sites exceeded the copper action level.

** We met the Treatment Technique for Total Organic Carbon.